

Remarks

I. Introduction

Original U.S. Patent No. 5,654,609 has claims 1-6.

This reissue application hereby adds new claims 7-28.

Broadened claims 7-28 have been added because the original patent upon which this reissue application is based is partly inoperative or invalid by reason of patentee claiming less than patentee had the right to claim.

No new matter has been added.

Thus, claims 1-28 are pending in this reissue application and are hereby presented for consideration by the Examiner.

II. Statement in Support of Amendments

In accordance with 37 CFR 1.121(b)(2)(iii), Applicant hereby submits the following explanation of the support in the disclosure of the patent for the above-referenced amendments.

The amendment of claims 1 and 5 are made to correct typographical errors in the text of U.S. Patent No. 5,654,609.

New independent claim 7 relates to a module for driving a gas discharge lamp in response to electrical power from a source. The module comprises a means for receiving power from the source. An oscillator is coupled to the receiving means for transforming the received

power to an output signal at a frequency and voltage for causing the lamp to produce visible light through gas discharge within the lamp envelope. A circuit board has the oscillator mounted thereon, wherein the circuit board is attached to the lamp. All of the features of this claim are supported by the original disclosure of U.S. Patent No. 5,654,609 - for instance, at col. 2, lines 43-56, and in Figures 5 and 7. In addition, the feature of the claim reciting "said circuit board is attached to said lamp" is supported by the original disclosure of U.S. Patent No. 5,654,609 which states, for instance, that "the board is attached for forming the end of the lamp ..." (col. 2, lines 54-55).

Claims 8-17, which depend from independent claim 7, are also supported by the disclosure of the original patent. For instance, claim 8 adds to claim 7 the limitation that the circuit board is attached externally to the lamp. This limitation is supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that "[i]t is possible to attach the circuit board externally to the end of the lamp envelope" (col. 2, lines 59-61).

Claim 9 adds to claim 7 the limitation that the circuit board is attached internally to an end of the lamp envelope. This limitation is supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that "the circuit board [is] positioned within the lamp envelope" (col. 2, lines 57-58).

Claim 10 adds to claim 7 the limitation that the lamp comprises an envelope.

Claim 11 adds to claim 10 the limitation that the envelope contains heater elements, while claim

12 adds to claim 11 the limitation that the oscillator output signal is coupled to the heater elements. Each of these limitations are supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that “[t]he present invention ... [has] ... a module for driving a gas discharge lamp having heater elements contained within an envelope” (col. 2, lines 57-58) and “the oscillator output signal [is] connected to the lamp heater elements” (col. 2, lines 55-56).

Claim 13 adds to claim 12 the limitation that the module further comprises means for attaching the oscillator to the lamp heater elements. This limitation is supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that “[a] group of four leads extend ... to provide the connections to the heater elements” (col. 8, lines 23-25). Claim 14 further provides that the attaching means comprise an output transformer having an array of pins and a plurality of leads connecting to the heater elements and a receptacle mounted on the circuit board for receiving the array of pins of the output transformer. This additional limitation is further provided in the original disclosure of U.S. Patent No. 5,654,609 at, for instance, col. 8, lines 20-30.

Claim 15 adds to claim 7 the limitation that the power source produces standard A.C. power, and the module further including means mounted on the circuit board for converting the received power for actuating the oscillator. This limitation is supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that “the power source can produce standard A.C. power with the module further including a circuit mounted on the circuit

board for converting the received A.C. power for actuating the oscillator” (col. 2, lines 62-65).

Claim 16 adds to claim 7 the limitation that the power source produces D.C. power, and the module further including means for actuating the oscillator from said received power from the D.C. source. This limitation is also supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that “[i]f the power source produces D.C. power, the module includes means for actuating the oscillator from said received power from the D.C. source” (col. 2, lines 65-67).

Claim 17 adds to claim 10 the limitation that the circuit board mounts the oscillator within a volume having a cross-section which is substantially the same as a cross-section of the lamp envelope. This limitation is supported by the original disclosure of U.S. Patent No. 5,654,609, which states, for instance, that “[the] circuit board mounts the oscillator within a volume having a cross-section configured substantially the same as the cross-section of the lamp envelope ” (col. 2, lines 52-54).

New independent claim 18 relates to a module for driving a gas discharge lamp in response to electrical power from a source. The module comprises a means for receiving power from the source. An oscillator is coupled to the receiving means for transforming the received power to an output signal at a frequency and voltage for causing the lamp to produce visible light through gas discharge within the lamp envelope. A circuit board has the oscillator mounted thereon. The circuit board is contained in a housing, and the housing is attached to the lamp. All

of the features of this claim are supported by the original disclosure of U.S. Patent No. 5,654,609 - for instance, at col. 2, lines 43-56, and in Figures 5 and 7. In addition, the feature of the claim reciting "said circuit board is contained in a housing, said housing attached to said lamp" is supported by the original disclosure of U.S. Patent No. 5,654,609 which shows a cylindrical unit 110 in Figure 5 and which states, for instance, "the module including a sleeve for retaining the board within" (col. 2, lines 60-62). Claims 19-28, which depend from claim 18, are also supported by the disclosure of the original patent, as discussed above in connection with claims 8-17, respectively.

Conclusion

In view of the aforementioned preliminary amendment and remarks, it is respectfully submitted that all claims currently pending in the above identified reissue application are now in condition for allowance, the earliest possible notice of which is earnestly solicited. If in the Examiner's opinion the prosecution of the present reissue application would be advanced by a telephone interview, he is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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